Application No. 10/691,570 Reply to Office Action of February 3, 2009

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-39 (Cancelled).

Claim 40 (New): A liquid injector for injecting at least a contrast medium into a subject whose fluoroscopic image is to be captured by an imaging diagnostic apparatus, wherein said contrast medium is available in a plurality of types having different concentrations of an effective component, said liquid injector comprising:

a liquid injection mechanism for injecting at least said contrast medium into said subject;

an injection control means for controlling operation of said liquid injection mechanism under the operating conditions whose data have been read;

a display/touch panel adapted to display a plurality of body sections in schematic images of shapes of a human body and accept selection of one of said body sections when one of the displayed plurality of body sections is touched, wherein when one of the body sections is selected, said display/touch panel is further adapted to display at least one of a plurality of regions to be imaged of the human body in schematic images of shapes of regions and accept selection of one of said regions to be imaged when one of the displayed regions to be imaged is touched; and

said injection control means is provided for reading out, from condition storage device, a base-operation condition including a predetermined injection time for the injection and a necessary dose of effective component of the contrast medium per unit weight of the subject, each of which is for the selected region, and a concentration of the effective

2

Reply to Office Action of February 3, 2009

component, for calculating a necessary volume of the contrast medium based on the read out necessary dose of effective component per unit weight and concentration of the effective component, for calculating a time-injection rate pattern as operation condition based on the calculated necessary volume of the contrast medium and the base-operation condition, and for performing the injection of said contrast medium based on the calculated time-injection rate pattern by controlling the operation of said liquid injection mechanism.

Claim 41 (New): A liquid injector according to claim 40, wherein said liquid injection mechanism comprises a contrast medium injection mechanism for injecting a contrast medium and a solution injection mechanism for injecting a saline solution,

said base-operation condition stored in said condition storage device is such a pattern that the injection of the contrast medium and the injection of the saline solution are interlinked for the selected region to be imaged, and

said injection control means is for reading out the base-pattern in which the injection of the contrast medium and the injection of the saline solution are interlinked, and for performing the interlinked injection of said contrast medium and said saline solution by controlling said contrast medium injection mechanism and said solution injection mechanism.

Claim 42 (New): A liquid injector according to claim 40, wherein said time-injection rate pattern is modified based on a body item of the subject.

Claim 43 (New): A liquid injector according to claim 42, wherein said body item is selected from a plurality of body items including body weight, body shape, age and gender.

Claim 44 (New): A liquid injector according to claim 43, wherein said body item is body weight, and the injection rate in said time-injection rate pattern is modified while the injection time is not changed.

Claim 45 (New): A liquid injector according to claim 40, wherein, said baseoperation condition including an injection time for the selected region is modified based on an imaging item.

Claim 46 (New): A liquid injector according to claim 45, wherein, said imaging item is selected from the types of the imaging diagnostic apparatus and imaging rates.

Claim 47 (New): A liquid injector according to claim 41, further comprising: medium loading means for removably loading an information storage medium which stores at least one of the data of body items for said subject and the data of imaging items;

wherein at least one of the data of body items and the data of imaging items is read out from the loaded information storage medium.

Claim 48 (New): A liquid injector according to claim 41, wherein at least one of the data of body items and the data of imaging items is read out on-line from an external database device which stores at least one of the data of body items for said subject and the data of imaging items.

Claim 49 (New): A liquid injector according to claim 40, wherein said condition storage means stores, as said base-operation condition, data of a variable pattern in which an

Application No. 10/691,570 Reply to Office Action of February 3, 2009

injection rate of said contrast medium is changed with time to keep said fluoroscopic image in a predetermined contrast range.